

[illegible]

Abstract of Disclosure

An exemplary mechanism for intelligent Point-to-Point Protocol over Ethernet (PPPoE) initialization is disclosed herein. During the PPPoE discovery stage, a PPPoE client of a CPE determines the status of a connection between the CPE and an access concentrator prior to transmitting a PADI and/or PADR packet. If a physical layer connection is established, the PPPoE client can provide the packet to the physical interface for transmission to the access concentrator. If a physical layer connection is not established, the PPPoE client either periodically rechecks the status of the connection until a physical layer connection is established or the PPPoE can terminate the PPPoE discovery stage after a certain number of iterations. Additionally, prior to waiting for a PADO or PADS packet, the PPPoE client can be adapted to check the status of the connection. If a physical layer connection exists, the PPPoE client can initiate the wait for the packet. However, if a physical layer connection has not been established, the PPPoE client can either reattempt a previous step of the PPPoE discovery stage or terminate the PPPoE discovery stage.

Figures